

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (Currently amended): A method for constructing a superconducting cable comprising N phases, the method comprising ~~the steps of~~

- providing each phase in the cable in the form of a number of superconducting phase conductors,
- classifying the phase-conductors in N-phase groups, each N-phase group comprising a phase conductor from each of the N different phases, where N is greater than one, and where the number of N-phase groups is larger than or equal to two,
- arranging insulation ~~means~~ in the cable around each phase conductor or between assemblies of phase conductors, and providing that said N-phase groups are electrically insulated from each other, and
- providing the N-phase groups or assemblies of N-phase groups with a common electrically conductive screen,

wherein the N-phase groups are arranged in a number of coaxial groups having a common axis, either with different phase conductors corresponding to different phases in each coaxial layer or with each individual phase conductor of a particular phase in a separate coaxial layer,

and wherein the common axis of the coaxial layers is oriented along the length of the superconducting cable.

Claim 2 (Currently amended): A method according to claim 1, wherein the individual phase conductors~~phases~~ only contain superconducting cable wire and an insulation system.

Claims 3-4 (Canceled)

Claim 5 (Currently amended): A method according to claim 1~~-or-2~~, wherein each of the phase conductors~~phases~~ is constructed by one or more individual conductors.

Claim 6 (Currently amended): A method according to claim 1, wherein all N-phase groups are gathered in one assembly which is surrounded by the common ~~electrical~~electrically conductive screen.

Claim 7 (Canceled)

Claim 8 (Original): A method according to claim 1, wherein the phases in each N-phase group or assembly of N-phase groups are separately and electrically isolated from each other.

Claim 9 (Currently amended): A method for constructing a superconducting cable comprising N phases, the method comprising ~~the steps of:~~

providing each phase in the cable in the form of a number of superconducting phase conductors;

classifying the phase-conductors in N-phase groups, each N-phase group comprising a phase conductor from each of the N different phases, where N is greater than one, and where the number of N-phase groups is larger than or equal to two;

arranging insulation ~~means~~ in the cable around each phase conductor or between assemblies of phase conductors, and providing that said N-phase groups are electrically insulated from each other; and

providing the N-phase groups or assemblies of N-phase groups with a common electrically conductive~~electrical~~ screen, wherein the phases in each N-phase group or assembly of N-phase groups are isolated from each other by a common insulator comprising at least one continuous foil.

Claim 10 (Original): A method according to claim 1, wherein the number of N-phase groups is larger than 10.

Claim 11 (Currently amended): A method according to claim 1, wherein the ~~electrical~~common electrically conductive screen is kept at 0 potential and consists fully or partially of superconducting, metallic, and semiconducting materials or of a combination of these materials with non-conducting materials and composites and is positioned close to the electrically insulating material.

Claim 12 (Canceled)

Claim 13 (Currently amended): A method according to claim 1, wherein at least one of the phase conductors~~phases~~ is constituted by a neutral conductor.

Claim 14 (Currently amended): A superconducting cable ~~comprising~~~~consisting of~~ N phases, wherein each phase in the cable comprises a number of superconducting phase conductors, the phase-conductors having been classified into N-phase groups, each N-phase group comprising a phase conductor from each of the N different phases, where N is greater than one, and where the number of N-phase groups is larger than or equal to two, and wherein insulation ~~means have~~has been arranged in the cable around each phase conductor or between assemblies of phase conductors, and so that said N-phase groups are electrically insulated from each other, and one or more of the N-phase groups or assemblies of N-phase groups ~~has~~have been provided with a common electrically conductive screen, wherein the N-phase groups are arranged in a number of coaxial groups having a common axis, either with different phase conductors corresponding to different phases in each coaxial layer or with each individual phase conductor of a particular phase in a separate coaxial layer, and wherein the common axis of the

coaxial layers is oriented along the length of the
superconducting cable.

Claim 15 (Original): A method according to claim 1, wherein the number of N-phase groups is larger than 100.

Claim 16 (New): A method according to claim 1, wherein the N phases are arranged concentrically with concentric insulation between each of the N phases.